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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------------------------------|-------------|----------------------|-------------------------|------------------|
| 09/998,565 | 11/16/2001 | Tomonari Ohtsuki | A34811-070793.0140 | 7829 |
| 21003 | 7590 | 02/18/2005 | EXAMINER TA, THO DAC | |
| BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112 | | | ART UNIT 2833 | PAPER NUMBER |

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 09/998,565 | Applicant(s) OHTSUKI ET AL. | |
| | Examiner Tho D. Ta | Art Unit 2833 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/27/02</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art (figures 4A , 4B and 5) in view of Armendariz (5,306,162).

Applicants' admitted prior art (figures 4A , 4B and 5) discloses an electrical connector 70 including a housing 72 having a fitting opening 20 for a mating connector, a flexible printed circuit board 26 having electric contact elements capable of detachably fitting with the mating connector, a block 74 embracing the flexible printed circuit board 26 with the housing 72, bit inserts 42 causing the block 74 and the housing 72 to be engaged with each other, and urging members 16 for urging the flexible printed circuit board 26 to a substrate 22.

However, Applicants' admitted prior art (figures 4A , 4B and 5) discloses the block 74 is provided with at least two positioning pins 36 as positioning means with respect to the housing 72, the positioning pins 36 being able to be slightly press-fitted in insertion apertures of the flexible printed circuit board 26, and the housing 72 is provided with positioning apertures at locations corresponding to the positioning pins 36 of the block 74. Accordingly, when it is time to replace the FPC board, the housing 72 is removed from the block 74, the FPC board 26 is not removed together with the housing,

then the block 74 must be removed from the FPC board, thus it will take much more time to replace the FPC boards.

Armendariz discloses the housing 50 is provided with at least two positioning pins 64 as positioning means with respect to the block 14, the positioning pins 64 being able to be slightly press-fitted in insertion apertures 38 of the flexible printed circuit board 12, and the block 14 is provided with positioning apertures 38a at locations corresponding to the positioning pins 64 of the housing 50. Thus, the connector of Armendariz would avoid undesirable misalignments between the contacts area (column 2, lines 3-30), further the housing and the flexible PCB 12 would be easily remove together as a unit from the block.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicants' admitted prior art (figures 4A , 4B and 5) by constructing the positioning means as disclosed by Armendariz in order to provide a reliable connector structure.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art (figures 4A , 4B and 5) and Armendariz (5,306,162) as applied to claim 1 above, and further in view of Palazzetti et al. (3,851,294).

Applicants' admitted prior art does not disclose that projections 28 are formed with chamfered portions at contacting portions with the flexible printed circuit board for preventing it from being scratched.

Palazzetti et al. discloses that projections 38 are formed with chamfered portions at contacting portions with the flexible printed circuit board 40 for preventing it from being scratched. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Applicants' admitted prior art (figures 4A , 4B and 5) by constructing the contacting portions as taught by Palazzetti et al. in order to protect the flexible printed circuit board.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**THO D. TA
PRIMARY EXAMINER**

tdt
02/16/05